

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method in a data processing system for displaying versions of a source code, each version reflecting an instance in an edit history, the method comprising the steps of:

determining the language of the source code;

storing indications of the edits to the source code;

converting the source code with the indications of the edits from the language into

a language-neutral representation that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member; and

using language-neutral representation to simultaneously display a text

representation and a corresponding graphical representation of the converted source code with the indications of the edits, showing visual differences of the source code through time,

wherein the graphical representation of the converted source code displays

a diagrammatic representation of the source code to demonstrate relationships between elements of the source code, and

wherein the graphical representation of the source code is not an alpha-numeric

display and is not merely a text representation on a user interface, and

calculating metrics selected from a group consisting of basic metrics, cohesion

metrics.

complexity metrics, coupling metrics, Halstead metrics, inheritance metrics, maximum metrics, polymorphism metrics, and maximum metrics by way of a quality assurance module, which monitors the modifications to the source, code.

2. (previously presented): The method of claim 1, wherein the source code and the corresponding graphical representation of the converted source code are displayed sequentially.

3. (previously presented): The method of claim 1, wherein a rate at which the source code with the indications of the edits is displayed is adjustable.

4. (previously presented): The method of claim 1, wherein the source code with the indications of the edits is displayed in reverse order.

5. (previously presented): The method of claim 1, wherein the graphical representation is one from a group consisting of a use case diagram, a sequence diagram, a collaboration diagram, a state transition diagram, an activity diagram, a package diagram, a component diagram and a deployment diagram.

6. (cancelled)

7. (cancelled)

8. (cancelled)

9. (cancelled)

10. (cancelled)

11. (cancelled)

12. (cancelled)

13. (currently amended): A method in a data processing system for displaying versions of a source code, the method comprising the steps of:

storing an edit to the source code; and

displaying simultaneously a text representation and a

corresponding language-neutral graphical representation of the source code that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member with an indication of the edit,

wherein the language-neutral graphical representation of the source code displays a

diagrammatic representation of the source code demonstrating

relationships between elements of the source code, and

wherein the language-neutral graphical representation of the source code is not an alpha-numeric display and is not merely a text representation on a user interface, and

calculating metrics selected from a group consisting of basic metrics, cohesion metrics,

complexity metrics, coupling metrics, Halstead metrics, inheritance metrics, maximum metrics, polymorphism metrics, and maximum metrics by way of a quality assurance module, which monitors the modifications to the source, code.

14. (previously presented): The method of claim 13, wherein the step of displaying the source code comprises the steps of:

determining a language of the source code;

converting the source code from the language into the language-neutral

graphical representation that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member; and

using the language-neutral graphical representation to simultaneously display a text representation and a graphical representation of the converted source code with an indication of the source code edit.

15. (cancelled)

16. (previously presented): The method of claim 14, wherein the source code is displayed after the converted source code with an indication of the edit is displayed.

17. (currently amended): A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having versions of a source code, each version reflecting an instance in an edit history, the method comprising the steps of:

determining a language of the source code;

storing indications of the edits to the source code;

converting the source code with the indications of the edits from the language into

a language-neutral representation that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member; and

using the language-neutral representation to simultaneously display a text

representation and a corresponding graphical representation of the source code

with indications of all the edits;

wherein the graphical representation of the source code displays

a diagrammatic representation of the source code demonstrating

relationships between elements of the source code, and

wherein the graphical representation of the source code is not an alpha-

numeric display and is not merely a text representation on a user

interface, and

calculating metrics selected from a group consisting of basic metrics, cohesion

metrics,

complexity metrics, coupling metrics, Halstead metrics, inheritance metrics,

maximum metrics, polymorphism metrics, and maximum metrics by way of a

quality assurance module, which monitors the modifications to the source code.

18. (original): The computer-readable medium of claim 17, wherein the source code and the corresponding graphical representation of the source code are displayed sequentially.

19. (original): The computer-readable medium of claim 17, wherein a rate at which the source code with the indications of the edits is displayed is adjustable.

20. (original): The computer-readable medium of claim 17, wherein the source code with the indications of the edits is displayed in reverse order.

21. (previously presented): The computer-readable medium of claim 17, wherein the graphical representation is one from a group consisting of a class diagram, a use case diagram, a sequence diagram, a collaboration diagram, a state transition diagram, an activity diagram, a package diagram, a component diagram and a deployment diagram.

22. (currently amended): A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having versions of a source code, each version reflecting an instance in an edit history, the method comprising the steps of:

storing indications of the edits to the source code; and

displaying simultaneously a text representation and a language-neutral graphical representation of

the source code that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member with indications of all the edits, wherein the language-neutral graphical representation of the source code of the source code displays

a diagrammatic representation of the source code to demonstrate relationships between elements of the source code, and

wherein the language-neutral graphical representation of the source code is not

an

alpha-numeric display and is not merely a text representation on a user

interface, and

calculating metrics selected from a group consisting of basic metrics, cohesion

metrics,

complexity metrics, coupling metrics, Halstead metrics, inheritance metrics, maximum metrics, polymorphism metrics, and maximum metrics by way of a quality assurance module, which monitors the modifications to the source, code.

23. (original): The computer-readable medium of claim 22, wherein the versions of the source code are displayed sequentially.

24. (original): The computer-readable medium of claim 22, wherein a rate at which the source code with the indications of the edits is displayed is adjustable.

25. (original): The computer-readable medium of claim 22, wherein the source code with the indications of the edits is displayed in reverse order.

26. (cancelled)

27. (cancelled)

28. (previously presented): The computer-readable medium of claim 22, wherein the language-neutral graphical representation is one from a group consisting of a class diagram, a use diagram, a sequence diagram, a collaboration diagram, a state transition diagram, an activity diagram, a package diagram, a component diagram and a deployment diagram.

29. (currently amended): A computer-readable medium containing instructions for controlling a data processing system to perform a method, the data processing system having a source code, the method comprising the steps of:

storing an edit to the source code;

displaying simultaneously a text representation and a language-neutral graphical representation of the source code that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member with indications of all the edits,

wherein the language-neutral graphical representation of the source code displays

a diagrammatic representation of the source code to demonstrate relationships between elements of the source code, and

wherein the language-neutral graphical representation of the source code is not an

alpha-numeric display and is not merely a text representation on a user interface, and

calculating metrics selected from a group consisting of cohesion metrics, complexity metrics, coupling metrics, Halstead metrics, inheritance metrics, maximum metrics, polymorphism metrics, and maximum metrics by way of a quality assurance module, which monitors the modifications to the source code.

30. (previously presented): The computer-readable medium of claim 29, wherein the step of displaying the source code comprises the steps of:

determining a language of the source code;

converting the source code from the language into the language-neutral representation; and

using the language-neutral representation to simultaneously display a text representation and a corresponding graphical representation of the converted source code with an indication of the edit.

31. (previously presented): The computer-readable medium of claim 29, wherein the step of displaying the source code with the edit comprises the steps of:

converting the source code with an indication of the edit from the language into the language-neutral graphical representation; and

using the language-neutral representation of the converted source code with an indication of the edit to display the graphical representation of the source code with the edit.

32. (original): The computer-readable medium of claim 29, wherein the source code is displayed after the source code with the edit is displayed.

33. (currently amended): A data processing system comprising:

a secondary storage including a source code;

a memory device including:

a program that stores indications of edits to the source code into the

memory device, and that simultaneously displays a text representation

and a corresponding language-neutral graphical representation of the

source code that includes a data structure having a source code

interface (SCI) model, an SCI package, an SCI class, and an SCI

member with indications of all edits,

wherein the language-neutral graphical representation of the source code

displays

a diagrammatic representation of the source code to demonstrate

relationships between elements of the source code, and wherein the language-neutral graphical representation of the source code is not an alpha-numeric display and is not merely a text representation on a user interface of the source code with the indications of the edits; a quality assurance module which monitors the modifications to the source code and calculates metrics selected from a group consisting of basic metrics, cohesion metrics, complexity metrics, coupling metrics, Halstead metrics, inheritance metrics, maximum metrics, polymorphism metrics, and maximum metrics; and a processor for running the program.

34. (original): The data processing system of claim 33, wherein the source code with the indications of the edits are displayed sequentially.

35. (original): The data processing system of claim 33, wherein a rate at which the source codes with the indications of the edits is displayed is adjustable.

36. (original): The data processing system of claim 33, wherein the source code with the indications of the edits is displayed in reverse order.

37. (previously presented): The data processing system of claim 33, wherein the program further:

determines the language of the source code,

converts the source code with the indications of the edits from the language into the language-neutral graphical representation, and uses the language-neutral graphical representation to simultaneously display a text representation and a corresponding graphical representation of the source code with indications of all the edits.

38. (previously presented): The data processing system of claim 37, wherein the memory device further comprises a transient meta model, wherein said transient meta model stores the language neutral graphical representation of the source code.

39. (previously presented): The data processing system of claim 33, wherein the graphical representation is one from a group consisting of a class diagram, a use case diagram, a sequence diagram, a collaboration diagram, a state transition diagram, an activity diagram, a package diagram, a component diagram and a deployment diagram.

40. (currently amended): A system for displaying versions of a source code, each version reflecting an instance in an edit history, the system comprising:
means for storing indications of the edits to the source code; and
means for simultaneously displaying a text representation and a language-neutral graphical representation of the source code that includes a data structure having a source code interface (SCI) model, an SCI package, an SCI class, and an SCI member with the indications of all the edits,

wherein the graphical representation of the source code displays

a diagrammatic representation of the source code to demonstrate relationships between elements of the source code, and wherein the graphical representation of the source code is not an alphanumeric display and is not merely a text representation on a user interface, and
a means for calculating metrics selected from a group consisting of basic metrics, cohesion metrics, complexity metrics, coupling metrics, Halstead metrics, inheritance metrics, maximum metrics, polymorphism metrics, and maximum metrics.